

ABSTRACT:

A SEM with an electrostatic objective lens 14, 16 and a detector 6, 8 for through-the-lens detection of secondary electrons (SEs) 24. A suitable collection efficiency of the SEs would require a comparatively high electric field near the surface of the specimen 18, whereas suitable voltage contrast (voltage range of the order of from 1 to 5 V) would require a moderate electric field near the surface of the specimen. In accordance with the invention an adjustable voltage source is provided in order to adjust at will the voltage of the final electrode 16 relative to the specimen, such that the voltage contrast and the collection efficiency can be adjusted to an optimum value in conformity with the measurement requirements.

Fig. 1